



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1127; Directorate Identifier 2010-SW-035-AD]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada (Bell) Model Helicopters

AGENCY: Federal Aviation Administration (FAA) DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Bell Model 430 helicopters, which would require replacing certain components of the air data system. This proposed AD is prompted by the discovery of incorrect indicated airspeed when the helicopter was tested to the cold temperature limits (-40 degrees centigrade) required for Category A operations. The proposed actions are intended to correct the published V_{ne} and to correct the indicated airspeed.

DATES: We must receive comments on this proposed AD by [insert date 60 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- **Federal eRulemaking Docket:** Go to <http://www.regulations.gov>. Follow the instructions for sending your comments electronically.
- **Fax:** 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

EXAMINING THE AD DOCKET: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l’Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272, or <http://www.bellcustomer.com/files/>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Mark F. Wiley, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd, Fort Worth, Texas 76137, telephone (817) 222-5110, fax (817) 222-5961, email mark.wiley@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD No. CF-2005-30, dated August 3, 2005, to correct an unsafe condition for the Bell Model 430 helicopters. Discrepancies in the processing and display of air data were revealed when testing at low temperatures to minus 40 degrees Centigrade (-40°C). The TCCA advises that modification to the instrumentation is required to reflect the V_{ne} airspeed values tested at temperatures to -40°C. The TCCA

states “This modification affects the software in the V_{ne} Overspeed Warning computer (required for Category A operations) and in the AFCS [Automatic Flight Control System] Air Data Computer.” TCAA issued AD CF-2005-30 to require the procedures in Bell Alert Service Bulletin (ASB) No. 430-05-35, dated June 21, 2005, for replacing the affected instruments. Bell also issued ASB No. 430-01-22, dated April 30, 2001 (ASB 430-01-22), which provided a temporary Rotorcraft Flight Manual Supplement and placards with information on airspeed corrections. TCCA did not issue an AD to mandate the provisions of ASB 430-01-22.

FAA’s Determination

These helicopters have been approved by the TCCA and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, TCCA has notified us of the unsafe condition described in the Canadian AD.

We are proposing this AD because we have evaluated all relevant information and determined that an unsafe condition exists and is likely to exist or develop on other helicopters of this same type design.

Related Service Information

Bell has issued ASB No. 430-05-35, dated June 21, 2005, which specifies, for helicopters with an overspeed warning system, replacing the overspeed warning computer, V_{ne} converter, and pilot and copilot airspeed indicator; leak testing the pilot pitot static system; and operationally testing the overspeed warning system. For helicopters with a single or dual Automatic Flight Control System (AFCS) with a Flight Director, ASB No. 430-05-35 specifies replacing the AFCS air data computer adapter module; leak testing the pilot pitot static system; and power-up and self-testing the

ALT/VSI. This ASB also specifies removing the V_{ne} -unreliable decals on the instrument panel on both configurations of these helicopters. TCCA classified ASB No. 430-05-35 as mandatory and issued AD CF-2005-30, dated August 3, 2005, to ensure the continued airworthiness of these helicopters.

Proposed AD Requirements

This proposed AD would require within 1 year, unless done previously:

- For helicopters with Overspeed Warning System:

- Replacing the overspeed warning computer, the V_{ne} converter, and the pilot and copilot airspeed indicator;

- Removing decal, P/N 430-075-070-103, if installed, from below the pilot and copilot airspeed indicators;

- Leak testing the pilot pitot static system; and

- Operationally testing the overspeed warning system.

- For helicopters with a Single or Dual AFCS with a Flight Director:

- Replacing the AFCS air data computer adapter module;

- Removing decal, P/N 430-075-070-101, if installed, from above the pilot and copilot electronic attitude direction indicators airspeed indicators;

- Leak testing the pilot pitot static system; and

- Power-up testing the altimeter/vertical speed indicator (ALT/VSI) and self-testing the ALT/VSI of the AFCS air data computer.

Differences Between this Proposed AD and the TCCA AD

We do not use the compliance date of July 31, 2007.

Costs of Compliance

We estimate that this proposed AD would affect 52 helicopters of U.S. registry. We estimate that operators may incur the following costs in order to comply with this AD:

- \$680 to replace the overspeed warning computer, pilot and copilot airspeed indicators, V_{ne} converter, and AFCS air data computer adapter module for each helicopter, assuming 8 work hours for each helicopter at an average labor rate of \$85 per work hour, and
- \$46,074 per helicopter for the required parts.

Based on these figures, we estimate the total cost impact of the proposed AD on U.S. operators to be \$2,431,208 for the fleet.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new Airworthiness Directive (AD).

BELL HELICOPTER TEXTRON CANADA: Docket No. FAA-2012-1127;
Directorate Identifier 2010-SW-035-AD.

(a) Applicability.

This AD applies to Model 430 helicopters: serial number (S/N) 49001 through 49103, with Overspeed Warning Kit, part number (P/N) 430-706-004-101 or P/N 430-706-004-103, installed; S/N 49001 through 49100, with Single Automatic Flight Control System (AFCS) with Flight Director Kit, P/N 430-705-009-103, -105, -109, -111, -115, -117, or P/N 430-705-011-109, -111, -121, or -123, installed; and S/N 49001 through 49100, with Dual AFCS with Flight Director Kit, P/N 430-705-011-103, -105, -115, -117, -125, -127, -129, -133, -135, or -137, installed, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as inability of the helicopters, based on testing, to operate at the published V_{ne} indicated airspeeds within the cold temperature limits (-40 degrees centigrade) required for Category A operations.

(c) Compliance.

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(d) Required Actions.

Within 1 year:

(1) For helicopters with an **Overspeed Warning System**, replace the Overspeed Warning Computer, P/N 430-375-013-103, with the Overspeed Warning Computer, P/N 430-375-013-105; the V_{ne} Converter, P/N ADI-21280-000, with the V_{ne} Converter, P/N ADI-21280-100; and the pilot and copilot Airspeed Indicator, P/N 222-375-027-117, with the pilot and copilot airspeed Indicator, P/N 222-375-027-119;

(i) If installed, remove the decal, P/N 430-075-070-103, from below the pilot and copilot airspeed indicators;

(ii) Leak test the pilot pitot static system; and

(iii) Operationally test the overspeed warning system.

(2) For helicopters with a **Single or Dual Automatic Flight Control System (AFCS) with a Flight Director**, replace the AFCS Air Data Computer Adapter Module, P/N 065-05041-0021, with P/N 065-05041-0031;

(i) If installed, remove the decal, P/N 430-075-070-101, from above the pilot and copilot electronic attitude direction indicators airspeed indicators;

(ii) Leak test the pilot pitot static system;

(iii) Power-up test the altimeter/vertical speed indicator (ALT/VSI) and self-test the ALT/VSI of the AFCS air data computer.

(e) Alternative Methods of Compliance (AMOC).

(1) The Manager, Rotorcraft Standards Staff, FAA may approve AMOCs for this AD. Send your proposal to: Mark F. Wiley, Aviation Safety Engineer, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd, Fort Worth, Texas 76137, telephone (817) 222-5134, fax (817) 222-5961, email mark.wiley@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(f) Additional Information.

(1) Bell Helicopter Textron Alert Service Bulletin (ASB) No. 430-05-35, dated June 21, 2005, and ASB No. 430-01-22, dated April 30, 2001, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272, or <http://www.bellcustomer.com/files/>. You may review the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in Transport Canada Civil Aviation AD No. CF 2005-30, dated August 3, 2005.

(g) Subject.

Joint Aircraft System/Component Code: 3417 Air Data Computer.

Issued in Fort Worth, Texas, on October 12, 2012.

Kim Smith,

Manager, Rotorcraft Directorate,
Aircraft Certification Service.

